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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,096	02/15/2001	Horst Sander	P00,1973	2731
26574	7590	09/14/2004	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			ALEXANDER, JESSE NELSON	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,096

Applicant(s)

SANDER ET AL.

Examiner

Jesse N. Alexander

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 13-17, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/30/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The abstract of the disclosure is objected to because **the title of the invention appears above the abstract paragraph and should be deleted**. Correction is required. See MPEP § 608.01(b).
3. The abstract of the disclosure is objected to because **it is not clear what the numbers in the parenthesis refer too**. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities: **"Brief Description of Drawings": heading and paragraph missing**.

Appropriate correction is required.

Claim Objections

5. Claim 14 is objected to because of the following informalities: because it recites "switching-internal monitoring signals" whereas the base claim, claim 12, recites "monitoring signals". The claim should be modified to recite the former limitation, to wit: "switching-internal monitoring signals". Appropriate correction is required.
6. Claim 20 is objected to because of the following informalities: the word "from" is misspelled in line 9. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 12, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. (US 6,181,680 B1) in view of ITU-T I.610 (11/95), applicant's cited prior art .

Regarding claim 12, Nagata et al. teaches a method for determining errors of a communication system, comprising the steps of:

- feeding monitoring signals (**OAM continuity check col. 5 lines 3-9 and lines 25-29**) at a beginning of at least one monitoring path (**Fig. 3 element S19**) of a communication system (**col. 4, lines 50-54 and fig. 1, element 61 on the left is the feeding unit or source**);
- coupling out said monitoring signals at an end of said at least one monitoring path (**col. 4, lines 50-54 and fig. 1, element 61 on the right is the coupling out unit or sink**),
- said at least one monitoring path being located inside a switching device of said communication system (**fig. 1, element 14, is the switching device through which the monitoring path passes**), said at least one monitoring path one of being extended up to boundaries of said switching device and being connected with external paths to a communication line

(as shown in fig. 1 the switching element 14 is connected to the line control units 61 via external links);

Nagata et al. however fails to teach determining a presence of an error inside said switching device given an absence of all signals at the end of said at least one monitoring path.

ITU-T I.610 (11/95), applicant's cited prior art, teaches determining a presence of an error inside said switching device **(generating AIS)** given an absence of all signals at the end of said at least one monitoring path **(section 6.2.1.1.2, VPC continuity check, ¶9)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Nagata et al. to include the teachings of ITU-T I.610 (11/95), applicant's cited prior art.

The motivation for said modification would have been to comply with the ITU-T I.610 recommendation, and thereby establish test methods that are compatible with other network equipment.

Regarding claim 18, Nagata et al. fails to explicitly disclose a method, further comprising the step of; operating said at least one monitoring path on each of switching-internal connection segments of communication connections that transmit signal, said each of switching-internal connection segments interfacing via a line link with external connection segments at one of a beginning and an end of said each of switching-internal connection segments.

However, ITU-T I.610 (11/95), applicant's cited prior art, teaches that the continuity cells can be transmitted at segment levels within the communication system **in the first paragraph of section 6.2.2.1.2.**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Nagata et al. to include the teachings of ITU-T I.610 (11/95), applicant's cited prior art such that individual segments or inter-switch connections (such as Network Node Interface (NNI) to Network Node Interface or NNI to User Node Interface (UNI) connections) could be tested within the communication system.

The motivation for said combination would have been to allow continuity testing on a segment-by-segment basis and thereby allow efficient fault isolation.

Regarding claim 20, Nagata et al. teaches a switching device for switching communication connections of a communication system comprising:

- a feed-in unit in order to feed monitoring signals (**fig. 1 element 40 commands element 61 (on the left hand side) to send out continuity signals, col. 5, lines 3-9**) in to a communication system given an absence of communication signals (**continuity check is performed before prior to the initiation of user cell transmission of communication signals, see col. 5, lines 39-44**) via an active communication connection, said feed-in unit being arranged on a switching-internal monitoring path of a common communication connection (**fig. 1, element 61, left side, see col. 4, lines 50-54**), said

switching-internal monitoring path one of extending up to boundaries of said switching device (**fig. 1, element 14**) being connected with external connections via partial paths of said switching device (**in fig. 3, the inter-switch paths between 5A, 5B, and 5C are partial paths or segments of the complete path from User1 to User2**),

- a coupling-out unit in order to couple out monitoring signals from said active communication connection (**fig. 1, element 61, right side, see again col. 4, lines 50-54**),
- said switching-internal monitoring path of said common communication connection (**monitoring path is through element 14 of fig. 1, shown as arrows**),
- said feed-in unit being located at a beginning of said switching-internal monitoring path (**fig. 1, element 61 left side**),
- said coupling out unit being located at an end of said switching-internal monitoring path (**fig. 1, element 61 right side**),
- said coupling-out unit being fashioned so as to recognize (**the coupling out unit (elements 61) must recognize monitoring cells because it checks the quality of the ATM cells it receives as described in col. 11, lines 49-52**) and to couple out monitoring signals fed in by said feed-in unit. (**fig. 1, element 61 right side couples out monitoring signals or OAM cells from the switching element and loops them back**).

Nagata et al. however fails to explicitly teach said coupling-out unit also to trigger an error message given an absence of all signals.

However, ITU-T I.610 (11/95), applicant's cited prior art, teaches that the coupling out unit or sink-point, given an absence of all signals (when it does not receive and user cell or continuity check cell), will send or trigger an Alarm indication signal (AIS) error message (**section 6.2.2.1.2, ¶9**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Nagata et al. to include the teachings of ITU-T I.610 (11/95), applicant's cited prior art such that the sink-point would respond to an absence of all signals by triggering error message in the form of an AIS.

The motivation for said modification would have been to comply with the ITU-T I.610 recommendation, and establish test and alarming methods that are compatible with other network equipment and allow effective fault isolation.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. (US 6,181,680 B1).

Regarding claim 19, Nagata et al. discloses a method by which the monitoring path is set up as a part of user signaling their desire to communicate via the communication system (**see fig. 3, element S1**). In the Nagata et al. invention, user request for service initiates the testing of the path through said communication system.

However Nagata et al. fails to explicitly disclose a method wherein said at least one monitoring path is at least part of a signalized communication connection and a signalized permanent communication connection.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Nagata et al. to comprise the method of using signalized or signaling initiated call set up and processing.

The motivation for said combination would have been to allow the checking of user initiated virtual path before user traffic is sent as Nagata et al. describes in col. 5, lines 39-43.

Allowable Subject Matter

10. Claims 13 through 17, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US-4,512,011 04-1985 Turner, Jonathan S.
- US-5,737,338 04-1998 Eguchi et al.
- US-6,101,167 08-2000 Shimada, Naohiro
- US-6,144,633 11-2000 Ikeda et al.
- US-6,134,219 10-2000 Sato, Kenichi

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesse N. Alexander whose telephone number is (571)272-3167. The examiner can normally be reached on 8:30 am to 5:00 pm.

Art Unit: 2666

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jna3

A handwritten signature in black ink, appearing to read 'Ricky Ngo', with a stylized flourish at the end.

RICKY NGO
PRIMARY EXAMINER